

CLAIMS

1. Device for dispensing a liquid, said device comprising a housing (1,2), equipped with a trigger (4), and arranged within said housing : an electrical circuit comprising a voltage source (10), a switch (11) arranged to be activated by pulling back said trigger, a motor (12), said motor being coupled to a pump (13), for pumping up said liquid from a container and ejecting said liquid through a nozzle (5),  
5 characterized in that said housing further comprises :
  - a valve housing comprising a first and second portion (20,21), interconnected by an opening (26), an inlet (17) towards said first portion (20) and an outlet (18) out of said second portion (21),
- 10 - a valve body (22) arranged inside said first portion (20), said body comprising a first portion (19) and a dome-shaped portion (24) integrally moulded with said first portion (19), said dome-shaped portion being of a resiliently flexible material and placed against a valve seat (25) formed around said opening (26), thereby closing off said opening, in the non-operative state of the device, and  
15 - a piston (30), in cooperative arrangement with said trigger (4), said piston being slidably arranged inside said second portion (21) of said valve housing (15), thereby substantially sealing off said portion from the outside environment, said piston (30) comprising a part (34) which can extend through said opening (26) when the trigger is pulled back, thereby pushing said dome-shaped portion (24) away from the valve seat.  
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2. The device according to claim 1, wherein said first and second portion of said valve housing (15)

and said first portion of said valve body (22) are cylindrical in shape.

3. The device according to claim 1 or 2, wherein said piston (30) is supported by a helical spring 5 (31) which rests on a seat (34), opposite said valve seat, said spring being arranged so that it is compressed when the trigger is pulled back.

4. The device according to claim 1, 2 or 3, wherein said housing is formed by two shell parts (1, 2) 10 assembled together.

5. The device according to claim 4, wherein said valve body (22) is held in place inside said valve housing by ribs (23), which are an integral part of said shell parts (1, 2).

15 6. The device according to any one of claims 1 to 5, wherein said device is closed at the bottom except for an opening for the passage of a flexible tube which is to be connected to the inlet (17) of said valve housing (15).

20 7. The device according to any one of claims 1 to 6, wherein said device is open at the bottom and comprises means for being attached on top of a liquid bottle.

8. The device according to any one of claims 25 1 to 7, wherein said pump is a gear pump.